

## **Abstract of the Disclosure**

Pervasive output capability is provided so that an information apparatus can pervasively output digital content to an output device regardless of the processing power, display screen size and memory space of the information apparatus. This allows small mobile devices with limited display, processing power, and memory to be able to output a digital document (e.g., PDF, HTML, PowerPoint etc) in its full original richness, without resorting to downsizing, truncating, reducing, clipping or otherwise altering the original document. The information apparatus may include means for establishing a communication channel between the information apparatus and a selected output device, and means for receiving at the information apparatus one or more attributes corresponding to the selected output device. The information apparatus may also include means for delivering at least part of a document object and at least part of an output device object to a controller device that is distinct from the information apparatus and the output device to generate output data for rendering output content.